

Report on OA and zbMATH EMS Meeting of Presidents Luminy, March 13-14, 2020

Klaus Hulek (Editor-in-Chief)
Olaf Teschke (Managing editor)

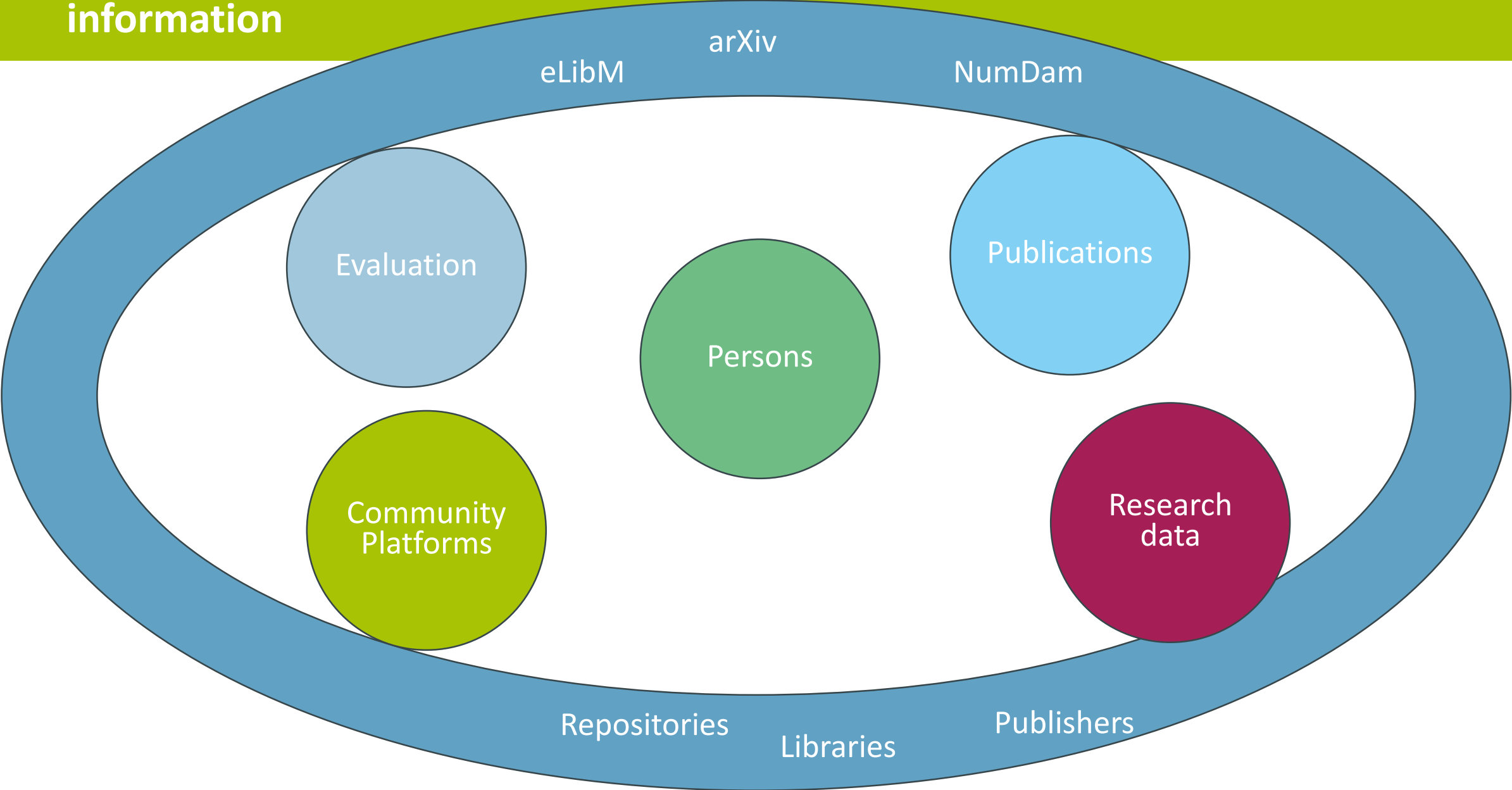
What would mathematicians expect from a modern information ecosystem?

- **Comprehensive** and **free** access to the available resources
- High scientific **quality** of information
- Options to **interlink** and **annotate** these resources
- Support to targeted **search, analysis** and **evaluation** of this information
- Generation of **impulses** for new research questions

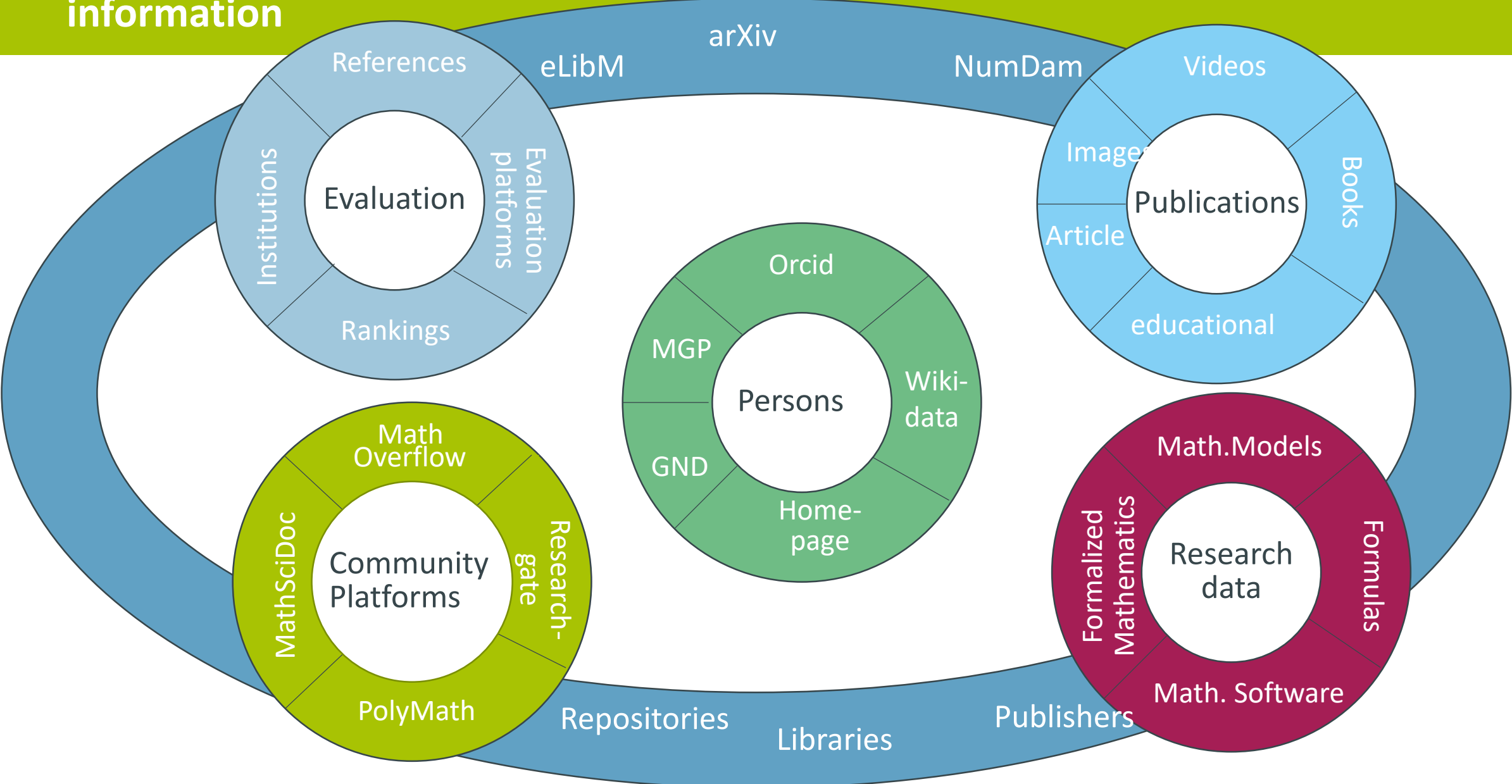


Functions and contents must go far beyond the current possibilities of closed systems (publishers, MathSciNet, zbMATH, Google Scholar, Researchgate, WolframAlpha...).

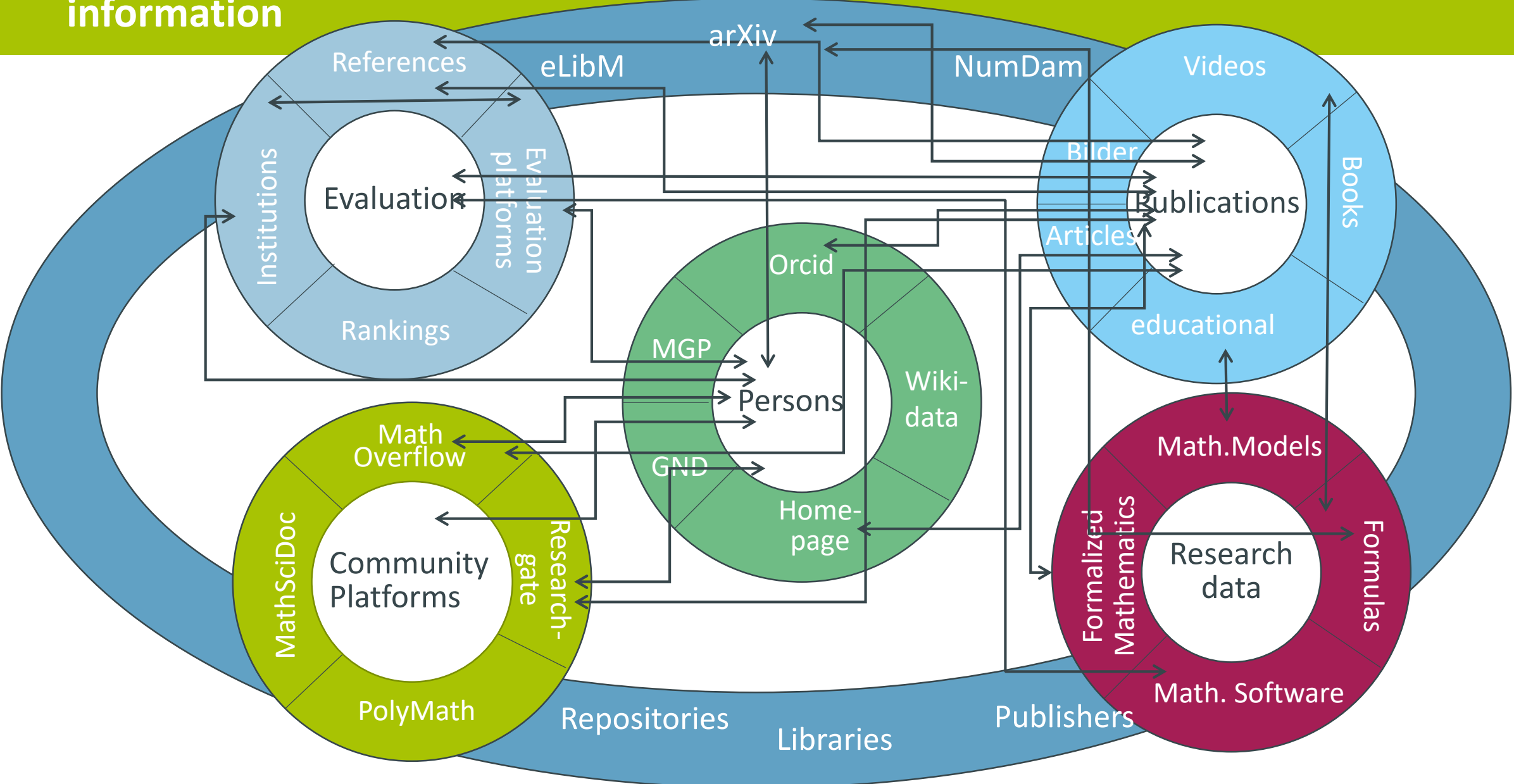
Networked mathematical information



Networked mathematical information



Networked mathematical information



zbMATH transition to Open Access (1) – Application process

Following a recommendation after the evaluation of FIZ Karlsruhe by the Leibniz Association 2017, an application to the German Joint Federal-State Committee for Science (GWK) was made for special funding to support the transition of zbMATH into a sustainable open service, in order to support such an open interlinked information infrastructure.

In a multi-step procedure, this proposal has been finally approved and will become effective in 2021:

- ✓ 01.08.2018 Application submitted
- ✓ 26.03.2019 Positive intermediate decision of GWK committee
- ✓ 06.12.2019 Positive final decision of GWK in the course for 2020 budget
- 2020 Allocation of positions to prepare the transition
- January 2021 *Start of zbMATH Open*

zbMATH transition to Open Access (2) – concrete steps 2020

- EMS, FIZ Karlsruhe, and Heidelberger Akademie have jointly terminated the publisher and cooperation contract with Springer Nature in due time to enable zbMATH Open in 2021
- Contract situation, especially with publishers, analysed
- Assessment by the legal department of FIZ of suitable licensing model has been prepared; CC-BY-SA will be default license for zbMATH Open data when possible, with exceptions depending on contract situations (e.g., for abstracts by authors, or inclusion of Open Data enforcing an NC license)
- Talks with publishers on future OA model have taken place accordingly
- Planning for OA and future continuation of cooperation with AMS discussed

zbMATH transition to Open Access (3) – concrete steps 2020 / 2021

- Press release + dissemination via several media (articles in preparation)
- Process started to make data from Jahrbuch für die Fortschritte der Mathematik (JFM) already open in 2020 thanks to approval from EMS
- Job descriptions for transition tasks have been defined and published; hiring process ongoing
- Main additional activities facilitated by zbMATH Open data from 2021:
 - Digital Mathematics Library functions, e.g. support of integration of free fulltexts and Plan S-compatible Green OA
 - Interfaces for and interaction with mathematical communities & research projects
 - Integration of mathematical research data

Current publication landscape of mathematical journals

Currently, the large majority of zbMATH-indexed journals (in all categories) are still subscription journals – in the higher categories, mostly society journals (often with moving wall policies), while lower categories of subscription journal are dominated by commercial publishers. Journals with APCs play basically no role in mathematics, while there is significant share of diamond (non-APC) OA journals.

However, the table does not reflect the growing huge number of journals with insufficient peer review; most of them are either APC (often operated by so-called predatory publishers) or without APC, but with quantitative publishing to boost publication/citation networks often related to the editorial board.

While transition to OA should serve the needs of mathematicians to enable FAIR, interconnected information, the crucial question to ensure the quality is open.

Category	Journals					Total # Publications					Recent # Publications				
	MW	APC	non	subs	total	MW	APC	non	subs	total	MW	APC	non	subs	Total
FAST TRACK	37	4	12	117	170	191721	226	9053	350425	551425	16419	128	885	28384	45816
KAT 1	40	16	111	325	492	116641	6786	99279	512591	735297	12386	922	13394	53734	80436
KAT 2	23	36	191	418	668	39553	21607	73563	545825	680548	2878	2513	9316	55961	70668
KAT 3	2	29	77	249	357	1252	10300	14332	159908	185792	125	2359	1785	17365	21634
Under Scrutiny	3	9	37	141	190	2440	7011	20719	87452	117622	194	1798	1370	6295	9657
Total	105	94	428	1250	1877	351607	45930	216946	1656201	2270684	32002	7720	26750	161739	228211

Category = internal zbMATH ranking for workflow decisions; MW =subscription with moving wall; APC = with article processing charge; non = non-APC OA; subs = subscription journal

See also EMS Newsletter 110, 60-63, [doi:10.4171/NEWS/110/19](https://doi.org/10.4171/NEWS/110/19)

Thank you!

© FIZ Karlsruhe 2020
Leibniz-Institut für Informationsinfrastruktur GmbH
www.fiz-karlsruhe.de

These documents are intended for presentation purposes only.
Copyright lies with FIZ Karlsruhe.
Any distribution or use of these documents or part thereof is
subject to FIZ Karlsruhe's express approval.

